



Mechanical Engineering Program Course Outline

First Year					
Fall Semester			Spring Semester		
Course	Catalog Identification	Credits	Course	Catalog Identification	Credits
Calculus 1	MATH 211	4.0	Calculus 2	MATH 212	4.0
General Chemistry 1	CHEM 170	4.0	Engineering Fundamentals	FENG 102	3.0
Introduction to Engineering	FENG 101	1.0	Computer Programming	FENG 221	3.0
Old Testament Survey	BIBL 123	3.0	Rhetorical Composition	COMP 111	3.0
Ancient & Medieval Cultures	HUMN 101	4.0	Renaissance & Early Mod Cul	HUMN 102	4.0
Semester Credits		16.0	Semester Credits		17.0
Second Year					
Fall Semester			Spring Semester		
General Physics 1	PHYS 203	4.0	General Physics 2	PHYS 204	4.0
Multivariable Calculus	MATH 303	4.0	Linear Algebra	MATH 307	3.0
Statics	MENG 201	3.0	Differential Equations	MATH 309	3.0
Applied Electrical Theory 1	EENG 201	3.0	Dynamics	MENG 202	3.0
Inquiring Minds	COMP 211	3.0	Mechanics of Materials	MENG 211	3.0
Semester Credits		17.0	Semester Credits		16.0
Third Year					
Fall Semester			Spring Semester		
Applied Math & Prog for Eng	FENG 301	3.0	Materials and Design	MENG 311	3.0
Machine Design	MENG 331	3.0	Systems and Controls	MENG 421	3.0
Fluid Mechanics	MENG 361	3.0	Heat Transfer	MENG 351	3.0
Thermodynamics 1	MENG 371	3.0	Thermodynamics 2	MENG 372	3.0
18 th & 19 th Centuries Cultures	HUMN 201	4.0	Fitness for Life	EXSC 101	1.0
			New Testament Survey	BIBL 124	3.0
Semester Credits		16.0	Semester Credits		16.0
Fourth Year					
Fall Semester			Spring Semester		
Vibrations and Dynamic Systems	MENG 431	3.0	Manufacturing Processes	MENG 411	3.0
Applied Thermal-Fluid Sciences	MENG 471	4.0	Applied Machine Design	MENG 432	4.0
Mechanical Design Project 1	MENG 481	3.0	Mechanical Design Project 2	MENG 482	3.0
Technical Elective	TECH αβγ	3.0	Technical Elective	TECH αβγ	3.0
FE Exam Preparation	MENG 400	1.0	Cultures of the 20 th /21 st Cent	HUMN 202	4.0
Christ and Culture	BIBL 471	3.0			
Semester Credits		16.0	Semester Credits		17.0
Total Credits All Semesters		132.0	Laptop Requirements		
Total Credits Engineering		70.0	Computer Type		PC (not Mac or Apple)
Total Credits Math		18.0	Operating System		Windows 10 or higher
Total Credits Physics		8.0	Memory		8 GB RAM (more is faster)
Total Credits Chemistry		4.0	Storage		250 GB (SSD is better than HDD)
			MS Office is free of charge provided through Milligan University		